Listing of Claims:

Claims 1-15 (canceled).

Claim 16 (Previously presented): A recombination device for catalytic recombination of reaction gases in the form of hydrogen and/or carbon monoxide with oxygen in a gaseous mixture, comprising:

a housing through which the gaseous mixture flows; and

at least one catalyst system having a first sub region and a second sub region located within said housing;

said first sub region including:

a first catalyst body positioned within said housing to receive said gaseous mixture; and

a retarding layer surrounding said first catalyst body, said retarding layer inhibiting diffusion of the reaction gases; and

said second sub region including:

a second catalyst body positioned in the flow direction after said first catalyst body, the reaction gases having direct access to said second catalyst body.

Claim 17 (Previously presented): The recombination device according to claim 16, wherein said second catalyst body has a higher catalytic activity than said first catalyst body.

Claim 18 (Previously presented): The recombination device according to claim 16, wherein the second catalyst body comprises a plate-shaped sheet metal carrier coated with a catalyst material.

Claim 19 (Previously presented): The recombination device according to claim 18, wherein the catalyst material contains a catalytically active precious metal.

Claim 20 (Previously presented): The recombination device according to claim 19, wherein the precious metal is selected from the group consisting of platinum and palladium.

Claim 21 (Previously presented): The recombination device according to claim 16, wherein said retarding layer is a porous layer of a bulk material.

Claim 22 (Previously presented): The recombination device according to claim 16, wherein said retarding layer is deposited as a porous cover layer onto the first catalyst body.

Claim 23 (Previously presented): The recombination device according to claim 16, wherein a plurality of identical catalyst systems are positioned parallel to each other.

Claim 24 (Previously presented): The recombination device according to claim 23, wherein the catalyst systems are plate-shaped and positioned less than 20 mm apart, and wherein each catalyst system has a total maximum thickness of 1 cm.

Claim 25 (Previously presented): The recombination device according to claim 24, wherein the thickness of each catalyst system is 0.3 mm.

Claim 26 (Previously presented): The recombination device according to claim 16, further comprising an up-current protection device receiving the gaseous mixture before said mixture impinges on said catalyst system, said up-current protection device ensuring a homogeneous recombination.

Claim 27 (Previously presented): The recombination device according to claim 16, further comprising a down-current protection device positioned after the gaseous mixture traverses said catalyst system, said down-current protection device protecting against a change in flow direction inside the recombination device.

Claim 28 (Currently amended): A method for catalytically recombining reaction gases in the form of hydrogen and/or carbon monoxide with oxygen in a gaseous mixture, comprising the steps of:

flowing the gaseous mixture through at least one catalyst system including a first sub region and a second sub region in the flow direction of the gaseous mixture, said first sub region having a first catalyst body and a retarding layer surrounding said first catalyst body, and said second sub region having a second catalyst body;

in said first sub region, catalytically recombining the reaction gases on the first catalyst body, inhibiting diffusion of said gases, and limiting catalytic recombination of said gases to produce a gaseous mixture with a reaction concentration below the ignition concentration;

flowing said gaseous mixture having a reaction concentration below the ignition concentration into the following second sub region; and

in said second sub region, catalytically recombining the reaction gases on the second catalyst body, said second catalyst body being directly accessible to the gaseous mixture.

Claim 29 (Previously presented): The method according to claim 28, further comprising the step of reducing the hydrogen content of the gaseous mixture in the first sub region through oxidation to less than 5% by volume.

Claim 30 (Previously presented): The method according to claim 28, further comprising the step of guiding the gaseous mixture through the retarding layer.

Claim 31 (Previously presented): The method according to claim 28, further comprising the step of guiding the entire gaseous mixture along the retarding layer.

Claim 32 (Previously presented): The method according to claim 28, wherein the reaction temperature in the first sub region is lower than the reaction temperature in the second sub region.

Claim 33 (Previously presented): The method according to claim 32, wherein the reaction temperature in the first sub region is lower than 560°C.

Claim 34 (Previously presented): The method according to claim 32, wherein the reaction temperature in the second sub region is higher than 560°C.

Claim 35 (Previously presented): The device according to claim 16, further comprising a teflon coating surrounding the retarding layer, said teflon coating preventing adsorption of water generated by the reaction gases within the retarding layer.